US005378491A

United States Patent [19]

Stanley et al.

[11] Patent Number: 5,378,491

[45] Date of Patent: Jan. 3, 1995

[54] **METHOD OF PREPARING A STARCH HYDROLYSATE, AN AQUEOUS STARCH HYDROLYSATE DISPERSION, METHOD OF PREPARING A FOOD CONTAINING A STARCH HYDROLYSATE, AND A FOOD FORMULATION CONTAINING A STARCH HYDROLYSATE**

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[21] Appl. No.: **918,952**

[22] Filed: **Jul. 30, 1992**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 746,432, Aug. 16, 1991, abandoned, and a continuation-in-part of Ser. No. 908,728, Jul. 6, 1992, which is a continuation of Ser. No. 578,994, Sep. 6, 1990, abandoned, which is a continuation-in-part of Ser. No. 483,208, Feb. 20, 1990, abandoned.

[51] **Int. Cl.**[6] **A23L 1/05**

[52] **U.S. Cl.** **426/661;** 127/32; 127/38; 127/65; 426/521; 426/573; 426/578

[58] **Field of Search** 426/661, 573, 578, 658, 426/603, 521, 604, 804, 18, 28; 127/29, 32, 33, 36, 38, 39, 40, 58, 65, 69, 70, 71; 252/315.3

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[57] **ABSTRACT**

A method or preparing reduced fat foods is provided which employs a fragmented, granular amylose starch having a melting onset temperature (as measured by differential scanning calorimetry) of greater than about 70° C. when measured at 20% starch hydrolysate solids. The fragmented, granular amylose starch hydrolysate is prepared by hydrolyzing a granular amylose starch in a strongly acidic aqueous slurry at a temperature greater than 70° C. or by hydrolysis at a lower temperature followed by heating a slurry, after neutralization, to raise the melting onset temperature. Also provided are food formulations in which the fragmented, granular amylose starch hydrolysate is used to replace fat and aqueous dispersions of the fragmented, granular amylose starch hydrolysate which are useful therein.

18 Claims, 2 Drawing Sheets